

## UNITED STATE DEPARTMENT OF COMMERCÉ Patent and Trampmark Office

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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. SERIAL NUMBER FILING DATE 650-US FLEISCHER 07/969,592 19/30/92 EXAMINER LEONARD CHARLES SUCHYTA 26MI PAPER NUMBER ART UNIT BELL COMMUNICATIONS RESEARCH, INC. 290 WEST MOUNT PLEASANT AVE. 2614 ROOM 2E-303 LIVINGSTON, NJ 07039 DATE MAILED: 63/10/93 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS This application has been axeminad A shortened stetutory period for rasponsa to this ection is set to expire\_ \_ month(s), \_\_\_\_\_ days from tha data of this lattar. Fellura to raspond within the pariod for response will cause the application to become abendoned. 35 U.S.C. 133 THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION: 2. Notica ra Patant Drewing, PTO-948. 1. Notice of Rafarencas Cited by Examinar, PTO-892. 3. Notice of Art Citad by Applicant, PTO-1449. 4. Notica of informal Patant Application, Form PTO-152. 5. Information on How to Effect Drawing Changas, PTO-1474. 6. SUMMARY OF ACTION Part II 1-10 1. Gielms ara pending in tha epplication. Of the abova, cialms \_\_ are withdrawn from consideration. 2. Claims 3. Cialms 1-10 4. Laims\_\_ 5. Claims \_\_\_ ara subject to restriction or election requirement. 7. This application has bean fliad with informel drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes. 8. Formal drawings era raquirad in rasponse to this Offica action. 8. 

Tha corractad or substituta drewings have been received on \_ ere accaptabla. not accaptabla (see axplanation or Notica re Patant Drawing, PTO-948). 10. The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_ \_\_\_\_ has (hava) baan 🔲 approvad by tha examiner. disapprovad by the axaminer (see explanation). 11. The proposad drawing correction, filad on \_\_\_\_\_\_\_\_ has been approved. disapproved (see explenation). 12. 🔲 Acknowledgment is mede of the claim for priority under U.S.C. 119. Tha certifiad copy has 🗀 been raceived 🔲 not been received been filad in parent application, sarial no. \_\_ \_\_\_ : filed on \_ 13. 

Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parts Quayle, 1935 C.D. 11; 453 O.G. 213. 14. Other

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- 1. The drawings submitted on Oct. 30, 1992 are objected to because of the informalities noted on the Form PTO-948. Correction is required. Note that the office already received the formal drawings submitted by the applicant on Jan. 22, 1993. The formal drawings have been forwarded to the drafting branch for reviewing; however, the response of the review has not yet been received. Therefore, the status of these formal drawings are deferred and will be addressed in the next office action.
- 2. The disclosure is objected to because of the following informalities:
- A) In the specification, page 1, line 5, change "asynchronous mode" to --asynchronous transfer mode--.
- B) In the specification, page 4, line 3, the acronym "SRTS" is not understood and must be defined.
- C) In the specification, page 7, line 32, the number "113" should be --13--.

Appropriate correction is required.

3. Claims 1-10 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, in lines 2-3 the term "said network"

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lacks antecedent basis. The term should be ——said packet—based telecommunications network—— (see also claims 3, 5 and 8). For clarity purpose, a comma is required to be inserted after the word "recovering" (in line 1) and after the word "network" (in line 2) (see also claims 3, 5 and 8). In lines 19—20, it is confusing to use the phrase "by a factor of N" because if this factor of N is different than the factor of an integer N used in step (a) then the timing clock of the service input cannot be recovered. Therefore, it is requested that said phrase be changed to read ——by the same factor of an integer N used in step (a) to recover the timing clock of the service input—— (see also claim 3).

Regarding claim 5, in lines 5-13, it is not clear how the means for dividing, means for counting, and means for transmitting are connected to each other. In line 12, it is unclear what is meant by "network clock pulses". It seems to the examiner that the applicant uses the underlined word "pulses" to indicate the word --cycles--. Note that the pulses, in some cases, are different than the cycles. Thus, it is requested that the underlined word "pulses" to be changed to --cycles-- (see also claim 8, line 14). In line 15, the term "the received RTSs" lacks antecedent basis (see also claim 7, line 3; claim 8, line 19; claim 10, line 3). It is not known how the received RTSs are obtained. In line 17, the term "those RTS counts" is incorrectly

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used because there are no counts for the RTS but the counts of the network clock cycles within the RTS periods. Therefore, the term should be changed to read—the counts of network clock cycles within said RTS periods— (see also claim 8, line 22). In lines 19-20, the claimed language does not clearly recite the purpose of the means for multiplying, and the phrase "by a factor of N" is confusingly used as already discussed in regard to claim 1 above. It is, therefore, recommended that the recitation in lines 19-20 to be changed to something similar to —means for multiplying the frequency of the pulse signal generated by said converting means by the same factor of an integer N used in said means for dividing for recovering the timing clock of the service input— (see also claim 8, lines 23-24).

Regarding claim 8, in line 15, insert the word --at-- before the term "that time" to avoid the grammatical error. In line 18, insert the word --to-- before the word "form".

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- -- Lau discloses, in patent number 4961188, a synchronous frequency encoding technique for recovering the timing of a source node input service signal at the destination node of the communications network.
- -- Singh and Lee disclose, in the article titled "Adaptive Clock

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Synchronization Schemes for Real-time Traffic in Broadband Packet Networks", a method for achieving synchronization in a broadband packet network where the effects of packet jitter is involved.

--Singh, Lee and Kim disclose, in the article titled "Jitter and Clock Recovery for Periodic Traffic in Broadband Packet Networks", the method for recovering the source clock frequency at the destination of the network.

All of the above-mentioned references fail to teach the technique for forming the residual time stamp (RTS) and counting the network clock cycles within the RTS period. Therefore, there are no art rejections are made to the claimed invention.

5. Claims 1-10 would be allowable if rewritten or amended to overcome the rejection under 35 U.S.C. § 112.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai H. Phan whose telephone number is (703) 305-8155.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
GROUP 2600

Hai H. Phan

March 05, 1993